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**Manufacture of cyclic polyester oligomers and high-molecular weight polyesters from the oligomers**

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**Patent:** Japan Kokai Tokkyo Koho ; JP 2002293903 A2 **Date:** 20021009

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**Language:** Japanese

**Class:** C08G-063/78A

**Abstract:**

High-mol. wt. polyesters are manufd. by esterification of 1 mol dicarboxylic acids with 1.0-1.6 mol diols, cyclization of the resulting linear oligomers, and ring-opening polymn. of the cyclic oligomers in the presence of catalysts. Thus, a slurry of 16.6:8.2 wt. parts terephthalic acid-ethylene glycol mixt. was continuously esterified and cyclized in the presence of  $\text{Ti}(\text{OCHMe}_2)_4$  in  $\alpha$ -methyl-naphthalene to give a cyclic oligomer, which was polymd. with PET chips in the presence of  $\text{Ti}(\text{OCHMe}_2)_4$  in a twin screw extruder to give PET with  $[\eta]$  1.31 at 25.degree.. (Abstract ordered from CAS)

**Section:**

CA237003 Plastics Manufacture and Processing

**Identifiers:** cyclic PET oligomer manuf, ring opening cyclization polyester manuf

**Descriptors:**

Polyesters,preparation ...

block; manuf. of high-mol. wt. polyesters by ring-opening polymn. of cyclic polyester oligomers

Polyesters,preparation ...

cyclized, oligomeric; manuf. of high-mol. wt. polyesters by ring-opening polymn. of cyclic polyester oligomers

Polyesters,preparation ...

manuf. of high-mol. wt. polyesters by ring-opening polymn. of cyclic polyester oligomers

Polymerization ...

oligomerization; manuf. of high-mol. wt. polyesters by ring-opening polymn. of cyclic polyester oligomers

Polymerization ...

ring-opening; manuf. of high-mol. wt. polyesters by ring-opening polymn. of cyclic polyester oligomers

**CAS Registry Numbers:**

9022-20-2DP 24968-12-5DP 25038-59-9DP 25610-17-7DP 26062-94-2DP

cyclized, oligomeric; manuf. of high-mol. wt. polyesters by ring-opening polymn. of cyclic polyester oligomers

25610-17-7P 127748-74-7P manuf. of high-mol. wt. polyesters by ring-opening polymn. of cyclic polyester oligomers

25038-59-9P preparation, manuf. of high-mol. wt. polyesters by ring-opening polymn. of cyclic polyester oligomers

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